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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,106	02/18/2005	Neil Malone	2135-00600	5672

23505 7590 09/05/2006

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EXAMINER

CAMPBELL, THOR S

ART UNIT

PAPER NUMBER

3742

DATE MAILED: 09/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/525,106	MALONE ET AL.	
	Examiner	Art Unit	
	Thor S. Campbell	3742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16, 18 and 19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9, 11, 12 and 18 is/are allowed.
- 6) ☒ Claim(s) 1-8, 10, 13-16 and 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5-8, 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2002/007861 A1 in view of Hopper et al. (US 3378673).

2002/007861 A1 discloses the claimed invention including, *inter alia*, a conduit having an inner plastic tube with a metal tube surrounding the inner plastic tube and being further enveloped by an outer plastic tube. 2002/007861 A1 fails to disclose the conduit being heated by an electric cable type heating element tracing the conduit.

Hopper discloses a flexible composite conduit having a conduit tracing heater applied between an inner plastic tube and an outer plastic tube. It would have been obvious to one of ordinary skill to modify the device of 2002/007861 A1 by providing a heating trace between the inner and outer tubes in order to provide a means to heat the fluid being conveyed through the tube of 2002/007861 A1 while maintaining the flexible characteristics of the tube. With respect to claims 13-16, it is noted that the change in material, and the desired result to do not patentably distinguish from the prior art.

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Claims 4, 10 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over 2002/007861 A1 and Hopper as applied to claim 1 above, and further in view of Montierth et al. (US 5294780).

2002/007861 A1 and Hopper disclose the claimed invention except the use of a PTC heater and specifically shaped insulation. Montierth discloses the use of a ptc heater for a heat trace and a standard insulation (column 5, lines 19-39) for snap fitting around the pipe and cable. It would have been obvious to one of ordinary skill to replace the heater of Hopper with the ptc heater of Montierth in order to self regulate and to provide the insulation as described for the purpose delineated by Montierth.

Allowable Subject Matter

Claims 9, 11, 12 and 18 are allowed.

Response to Arguments

Applicant's arguments filed 06/15/06 have been fully considered but they are not persuasive. Applicant's arguments seem to rest entirely on the argument that the references as applied by the examiner lack the requisite motivation. The examiner disagrees that the motivation to combine the teachings of the cited art is lacking in either the references or the common knowledge in the art. The prior art is replete with teachings of heated and unheated hose/tube/pipe configurations. One skilled in the art would certainly look at both heated and unheated hose/tube/pipe configurations when endeavoring to improve on either heated or unheated composite hose/tube/pipe configurations. As such, absent a direct "teaching away" of the two references, each from the other, the combination of the teachings of Montierth with those of 2002/007861 A1 are still considered obvious to one of ordinary skill in the art.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thor S. Campbell whose telephone number is 571-272-4776. The examiner can normally be reached on Mon-Fri 5:30AM-2:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on 571-272-4777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TSC

THOR S. CAMPBELL
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to be 'TSC' or a stylized version of the name, located below the printed name of the examiner.